The Continuous Evolution of the Student Data Warehouse at the University of Houston

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University of Houston

- 43,774 students
- 14 colleges
- 110 bachelors, 119 masters, 47 doctoral, and 3 professional programs
- 9,596 degrees awarded annually



Outline

- What got UH to a Data Warehouse
- Phases of DW Implementation
- New Areas
- Snapshots
- Warehouse Tables
- Reports Demonstration

What got UH to a Data Warehouse

- UH Finance data first in 2007 then student data in 2009
- Longitudinal outlook and analysis of student admissions and enrollment data
- One source of data for the truth
- Easily accessible historical trends of data

What got UH to a Data Warehouse

- Options for data view or query:
 - IR Statistical Handbook
 - PeopleSoft Query Tool
 - Reporting Tables
 - Dashboard
- Collaboration between Institutional Research and the Data Warehouse team in IT

Phases of DW Implementation

- Finance
- Student Enrollment
- Admissions
- Honors College
- Financial Aid

Admissions

- Decision on start and stop of weekly snapshots
- Create admission reports after meeting with stakeholders and assessing their needs
- New Fields: Redesigned SAT scores
- Logic Changes:
 - Completed Applications
 - Split Post-Baccalaureate students from other groups

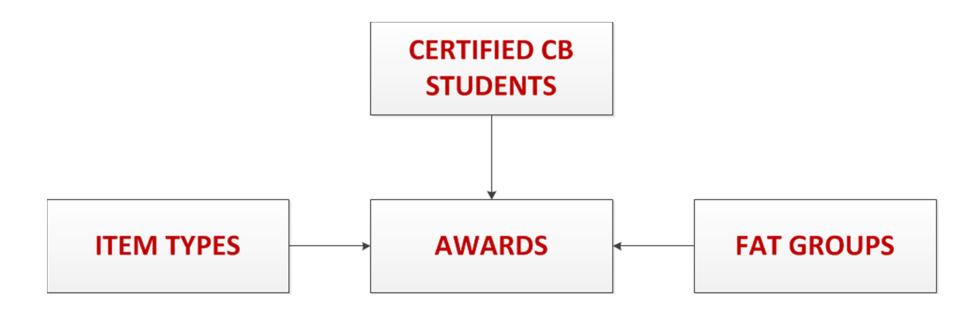
Honors College

- Students participate from all academic colleges
- Data not easily accessible before
- Worked with College to ensure accuracy of identifying students in system by 20th Class Day
- Historical Data: one time update in DW table starting Fall 2009

Current Financial Aid

- Designed in 2009
- Limited to Fall enrolled students
- Designed for CDS, US News by consulting firm
- Limited fields and not flexible
- No consideration for Admission relationship

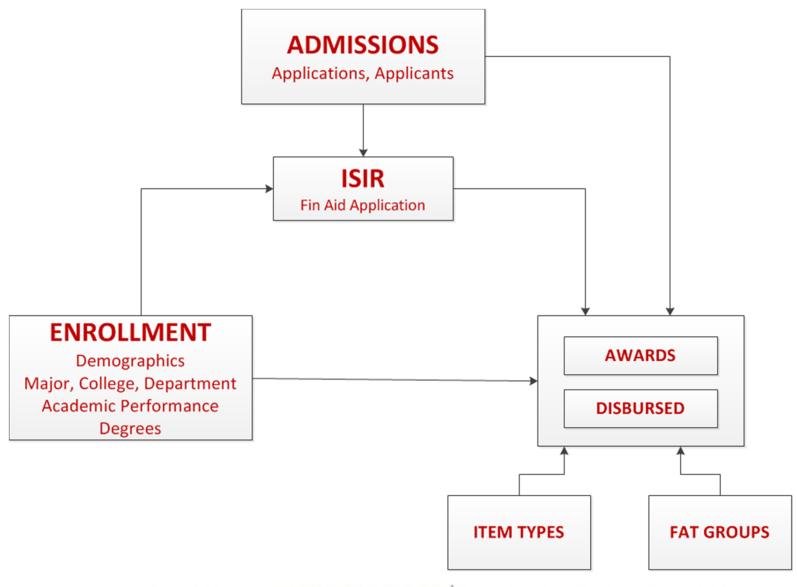
Current Financial Aid



New Financial Aid

- Work with financial aid office to understand business practices, terminologies and relationships (e.g. ISIR, Awards, Item Types)
- Complete re-design of Financial Aid DW
- Added more tables and fields to capture wide array of financial aid data
- More robust and dynamic
- Considered the relationship with Admission and Enrollment

New Financial Aid



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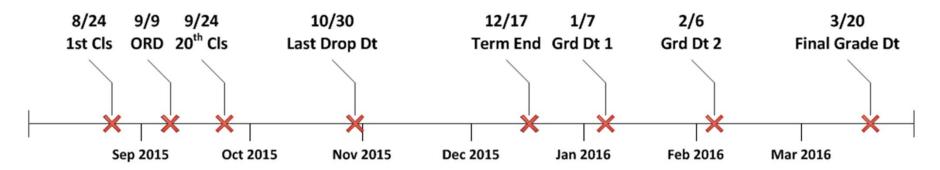
New Financial Aid

- Daily data refresh
- Weekly snapshot
- Decision on an Aid Year begin and end snapshots
- Design process to capture data moving forward
- Decisions:
 - Past Aid Year data recovery: Logic to split between
 Fall-Spring, handle summer
 - Issue with historical data recovery
- Worked with Financial Aid office on validation
- Documentation

Snapshots

- Pulled on key dates in a semester
- Enrollment tables nine snapshots
- Admission and Financial Aid snapshots are weekly on Monday

Fall 2015 Enrollment Snapshots

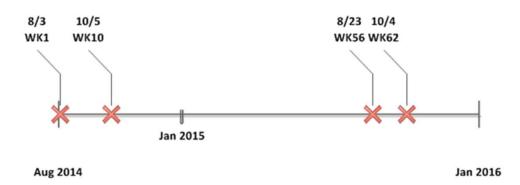


Aug 2015 Apr 2016

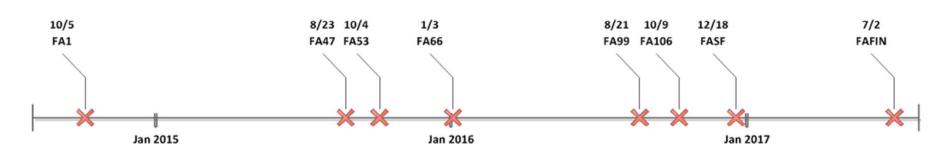
Snapshot	Period Description	Capture Date
PFC	ONE WEEK PRIOR FIRST CLASS DAY	8/17/2015
FCD	FIRST CLASS DAY	8/24/2015
CEN	CENSUS	9/9/2015
TCD	TWENTIETH CLASS DAY	9/24/2015
LDD	LAST DROP DATE	10/30/2015
TED	TERM END DT	12/17/2015
GD1	GRADE DT 1	1/7/2016
GD2	GRADE DT 2	2/6/2016
FGD	FINAL GRADE DT	3/20/2016

Admission and Financial Aid Weekly Snapshots

Fall 2015 Admissions



Aid Year 2016 Financial Aid

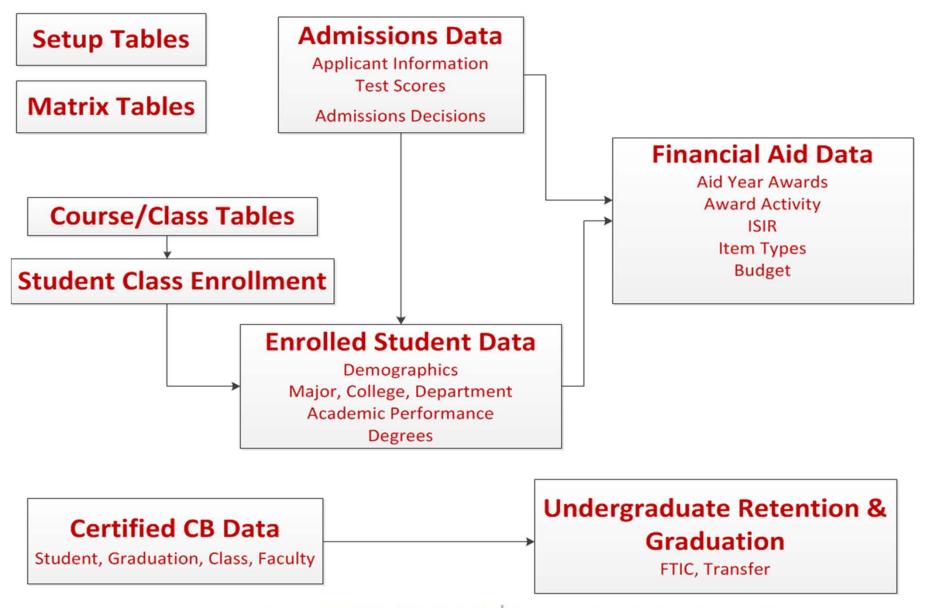


Aug 2014

New Data Warehouse Tables

- Admissions tables: Data from Fall 2010 to present
- Financial Aid tables:
 - Setup: Facilitates DW functionality
 - Data: Aid Year 2010 to present

Data Warehouse Tables

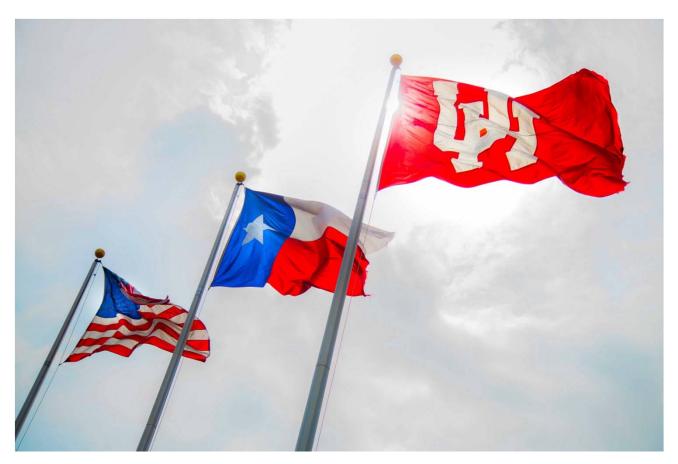


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Reports Demonstration

Future

- Tableau Implementation
- Build Reports: Financial Aid, Explore Admissions-Financial Aid relationship
- On-going data improvements
- New Modules: Student Financials, Research



Thank you!!

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